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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,030	11/29/2001	Michael Johannes Deindl	DE920000045US1	6811

7590 09/10/2004

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EXAMINER

RAMPURIA, SATISH

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/998,030

Applicant(s)

DEINDL ET AL.

Examiner

Satish S. Rampuria

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***DETAILED ACTION***

1. This action is in response to the application filed on 11/29/2001.
2. Claims 1-12 are pending.

***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been received on 11/29/2001.

***Claim objections***

4. Claims 1 and 9 are objected to because of the following informalities:  
  
Regarding claim 1, the word "between" is printed twice.  
  
Regarding claim 9, the steps should be numbered as i) and ii) instead i) and i).  
  
Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1, 7, and 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are non-statutory because they recite components of debugging chipcard application, representing functional descriptive material without a computer readable medium or

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computer implemented, program per se are not tangibly embodied. Claims 1-7 and 11 thus amounts to only abstract idea and are nonstatutory.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3, 4, and 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by European Publication No. EP0356237 to Shinagawa (hereinafter called Shinagawa).

**Per claims 1 and 3:**

Shinagawa disclose:

- A method for debugging chipcard applications (col. 2, lines 37-38 “provide an IC card... operation test and a debugging of an application program”) comprising:
- using a chipcard application/terminal application standard communication protocol (col. 4, lines 9-10 “MPU 1 communicates data with the terminal via the signal input/output unit 2”) for transporting business commands of a terminal application to a chipcard application (col. 4, lines 37-39 “These data items are transferred between the IC card and the terminal having the IC card reader/writer”) and debug information of a debug control

program to the chipcard application (col. 5, lines 11-16 “a debug processing data write program or debugger program to load in a debug processing data... including information to... initiating... or an execution start... of the application program”); and

- evaluating the business commands and debug information (col. 6, lines 1-2 “MPU 1 decodes a command supplied from the external device”) in a module layered between the chipcard application and the terminal application, and between the chipcard application and the debug control program (col. 3, lines 30-33 “the application program can be partially executed so as to output a result of the execution to the external device”). It is interpreted that IC cards can be a JAVA card or smart card.

**Per claim 4:**

Shinagawa disclose:

- wherein evaluating the business commands and debug information further comprises determining whether an incoming command is an incoming debug instruction (col. 6, lines 29-34 “if command indicates a write a command of debug processing data, the debug processing data... loads the debug processing data... with the debug processing data sent from the external device”).

**Per claim 7:**

Shinagawa disclose:

- A method for debugging chipcard applications (col. 2, lines 37-38 “provide an IC card... operation test and a debugging of an application program”) comprising:

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- evaluating debug control information to distinguish between debug information input (col. 6, lines 1-2 “MPU 1 decodes a command supplied from the external device”) and business information input to a chipcard application (col. 4, lines 37-39 “These data items are transferred between the IC card and the terminal having the IC card reader/writer”);
- sending, based upon the evaluation, debug information output to a debug control program and business information output to a terminal application (col. 6, lines 23-34 “In the ordinary processing mode, when the command from the external device is a write command... so-called downloading is achieved... execute the program write program... store the data of application program... if command indicates a write a command of debug processing data, the debug processing data... loads the debug processing data... with the debug processing data sent from the external device”).

**Per claim 11:**

Shinagawa disclose:

- means for enabling an evaluation of debug control information for distinguishing between debug information input (col. 6, lines 1-2 “MPU 1 decodes a command supplied from the external device”) and business information input to a chipcard application(col. 4, lines 37-39 “These data items are transferred between the IC card and the terminal having the IC card reader/writer”);
- means for sending, based upon the evaluation, debug information output to a debug control program and business information output to a terminal application (col. 6, lines 23-34 “In the ordinary processing mode, when the command from the external device is a

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write command... so-called downloading is achieved... execute the program write program... store the data of application program... if command indicates a write a command of debug processing data, the debug processing data... loads the debug processing data... with the debug processing data sent from the external device”).

**Claims 8 and 10** are the computer program product claim corresponding to method claim 1 and rejected under the same rational set forth in connection with the rejection of claim 1 above.

**Claim 9** is the computer program product claim corresponding to method claim 7 and rejected under the same rational set forth in connection with the rejection of claim 7 above.

**Claim 12** is the system claim corresponding to method claim 7 and rejected under the same rational set forth in connection with the rejection of claim 7 above.

Substantially as claimed.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinagawa in view of admitted prior art.

**Per claims 2:**

Shinagawa does not explicitly disclose debug information is transported within Application Protocol Data Units (APDUs).

However, admitted prior art discloses in an analogous computer system debug information is transported within Application Protocol Data Units (APDUs) (Applicant's specification, page 2, 3<sup>rd</sup> paragraph "running a chipcard application in cooperation with the respective terminal application the master issues a command wrapped-in in a message-like format, the so-called Application Protocol Data Unit").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of using Application Protocol Data Unit as taught in admitted prior art in corresponding to the method of debugging chipcard as taught by Shinagawa. The modification would be obvious because of one of ordinary skill in the art would be motivated to the Application Protocol Data Unit to provide an efficient debugging development of chipcard applications as suggested in admitted prior art (Applicant's specification, page 3, 4<sup>th</sup> paragraph).

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinagawa in view of US Publication No. 2001/0000814 to Montgomery et al. (hereinafter called Montgomery).

**Per claims 5 and 6:**

Shinagawa does not explicitly disclose sending the incoming command to the chipcard application; receiving a response from the chipcard application; and sending the response to the



debug control program if the incoming command was determined to be an incoming debug instruction.

However, Montgomery discloses in an analogous computer system sending the incoming command to the chipcard application (pub page 2, paragraph 25 "smart card... waits... it receives a response... from the terminal"); receiving a response from the chipcard application (pub page 2, paragraph 25 "once the response has been received, the smart card... returns to idle state... to communicate with the terminal"); and sending the response to the debug control program if the incoming command was determined to be an incoming debug instruction (pub, page 4, paragraph 40 "Referring to FIG. 10, one such application begins with executing a debugging routine (ST101), for example, a memory test routine").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of sending command to the chipcard and identifying the debug command as taught by Montgomery in corresponding to the method of debugging a chipcard as taught by Shinagawa. The modification would be obvious because of one of ordinary skill in the art would be motivated to identify the command and based on result start the processing as suggested by Montgomery (page 1, paragraph 4).

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Satish S. Rampuria** whose telephone number is **703-305-8891**.

The examiner can normally be reached on **8:30 am to 5:00 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kakali Chaki** can be reached on **(703) 305-9662**. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria  
Patent Examiner  
Art Unit 2124  
09/07/2004

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